



RESIDENTIAL EROSION CONTROL PLAN REQUIREMENTS

A residential building permit application must contain sufficient information to allow the Development Services Department to determine whether the lot development complies with the requirements of the Grading and Stormwater chapter of the Unified Development Code (UDC).

Single and Two Family Residential Sites. All residential lots must maintain properly installed erosion and sediment control measures from the beginning of construction until slope stabilization and/or vegetation is established in order to prevent silt and sediment from going offsite or into the street. **Prior to the issuance of the Certificate of Occupancy (C of O), vegetation must be established to adequately prevent erosion and sediment from leaving the site.**

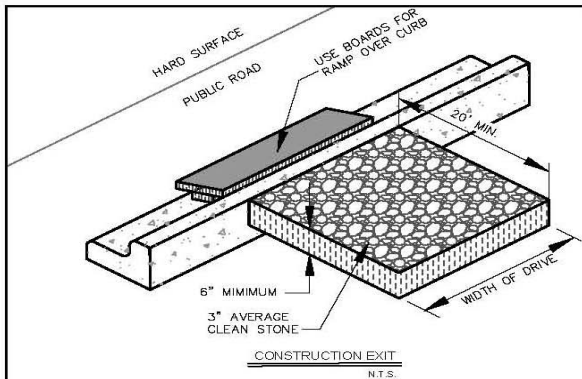
Erosion and Sediment Control Plan:

The Grading and Erosion & Sediment Control Plan can be combined as long as all key features are identified and legible in the opinion of the reviewer. Submittal information and plans for erosion control shall include, but not be limited to the following:

1. The Erosion and Sediment Control Plan shall be drawn to a legible conventional Engineer scale (1" = 20') using the site plan as the base map.
 - a. Show location of permit box, construction entrance/exit, concrete truck wash area, portable toilet, and trash containment.
 - b. Indicate areas to be left undisturbed including soil and grading disturbance.
 - c. Show location of wattles, dikes, socks, stone check dams (for concentrated flow) and/or other sediment barriers. Silt fence is acceptable, but discouraged on small flat sites where excessive silt storage is not necessary.
 - d. Indicate how nearby stormwater systems such as curb inlets will be protected from any mud, sediment, or debris that reaches them.
 - e. Indicate the method of re-vegetation proposed. Below are minimum standards acceptable to the City for re-vegetation: **(Note: Established vegetation required for C of O.)**
 - i. Minimum of 4 inches of topsoil shall be required, either existing or installed, in areas to be re-vegetated.
 - ii. *Slopes Zero to 10% grade:* Re-vegetation shall be a minimum of seeding and mulching.
 - iii. *Slopes 10:1 up to 4:1 grade:* Re-vegetation shall be a minimum of hydro-seeding with mulch and fertilizer, sod, or groundcover.
 - iv. *Slopes 4:1 to 3:1 grade:* The slope shall be covered with landscape fabric and hydro-seeded with mulch and fertilizer, or staked sod, or groundcover.
 - v. *Slopes more than 3:1 grade:* Any finish grade over 3:1 must be approved by the City Engineer. Options available include Retaining walls; Terracing with groundcover; Staked Sod (up to 2:1 slope).
 - f. Provide details of proposed erosion control features not included in city standard details. (Standard details can be provided by city staff).
2. A Temporary Certificate of Occupancy may be considered by the Building Official when vegetation has not been established to adequately prevent erosion and sediment from leaving the site due to unfavorable weather conditions, and erosion control matting along with perimeter erosion controls have been adequately established to temporarily prevent soil loss along with a performance bond to install sod in the remaining areas at the appropriate time.

Disturbed sites over one acre may be subject to additional ADEQ rules and guidelines not specified herein.

TYPICAL EROSION CONTROL DETAILS

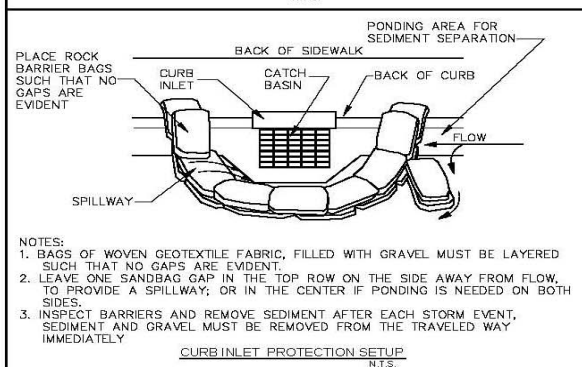
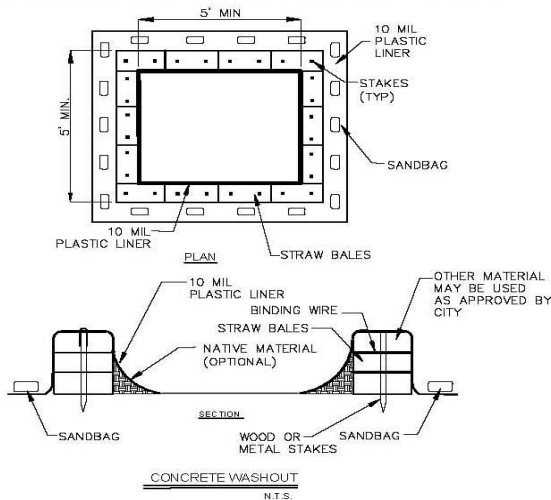


CONSTRUCTION EXIT NOTES

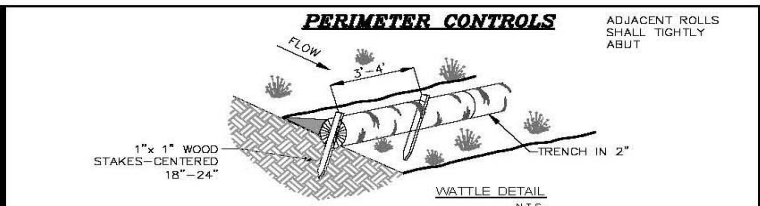
1. REPLACE CONTAMINATED STONE AS REQUIRED TO PREVENT TRACKING OF SEDIMENT OR MUD ON PUBLIC STREETS.
2. CLEAN STREETS DAILY WITH BROOM AND SHOVEL. THE USE OF WATER IS PROHIBITED.
3. ALL VEHICLES MUST USE CONSTRUCTION EXIT.

WASHOUT NOTES

1. NO WASHING OUT OF CONCRETE TRUCKS OR WASHING OF SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS IS ALLOWED.
2. EXCESS CONCRETE IS NOT ALLOWED TO BE DUMPED ON-SITE, EXCEPT IN DESIGNATED TEMPORARY CONCRETE WASHOUT PIT AREAS.
3. ON-SITE TEMPORARY CONCRETE WASHOUT AREAS WILL BE LOCATED AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES AS DETERMINED IN THE FIELD.
4. TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
5. WASHOUT FACILITIES WILL BE CLEANED OUT OR REPLACED ONCE THE WASHOUT IS 75% FULL.
6. PLASTIC LINING MATERIAL WILL BE MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND WILL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS.
7. WHEN WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR WORK, THE HARDENED CONCRETE WILL BE REMOVED AND DISPOSED OF OFF-SITE. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE REMOVED FROM THE SITE AND DISPOSED OF.

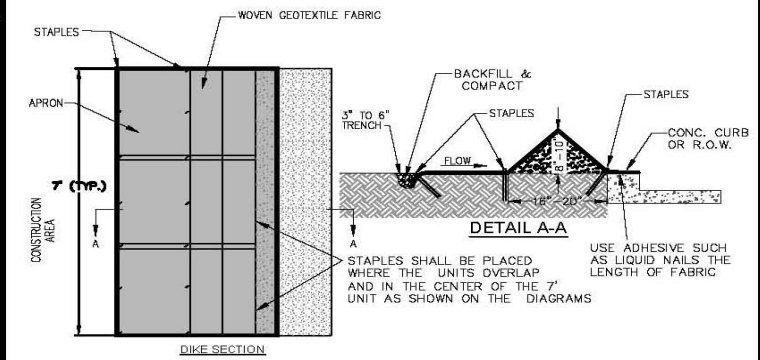


- NOTES:**
1. BAGS OF WOVEN GEOTEXTILE FABRIC, FILLED WITH GRAVEL MUST BE LAYERED SUCH THAT NO GAPS ARE EVIDENT.
 2. LEAVE ONE SANDBAG GAP IN THE TOP ROW ON THE SIDE AWAY FROM FLOW, TO PROVIDE A SPILLWAY; OR IN THE CENTER IF PONDING IS NEEDED ON BOTH SIDES.
 3. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.



INSTALLATION NOTES

1. WATTLES SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR, OR COCONUT FIBER.
2. NOT FOR USE IN CONCENTRATED FLOW AREAS.
3. THE WATTLES SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF TWO (2) INCHES.
4. WATTLES SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.
5. ON SLOPES, WATTLES SHOULD BE INSTALLED ON CONTOUR WITH A SLIGHT UPWARD CURVE AT THE END OF THE ROW IN ORDER TO PREVENT PONDING.
6. RUNNING LENGTHS OF WATTLES SHOULD BE ABUTTED FIRMLY TO ENSURE NO LEAKAGE AT THE ABUTMENTS.
7. WHEN INSTALLING RUNNING LENGTHS OF WATTLES, BUTT THE SECOND WATTLE TIGHTLY AGAINST THE FIRST, DO NOT OVERLAP THE ENDS. STAKE THE WATTLES AT EACH END AND FOUR FEET ON CENTER.
8. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE, LEAVING 2 - 3 INCHES OF THE STAKE PROTRUDING ABOVE THE WATTLE. WHEN INSTALLING WATTLES ON SLOPES, DRIVE THE STAKES PERPENDICULAR TO THE SLOPE.
9. DRIVE THE FIRST END STAKE OF THE SECOND WATTLE AT AN ANGLE TOWARD THE FIRST WATTLE IN ORDER TO HELP ABUT THEM TIGHTLY TOGETHER.
10. STAKING: THE CITY RECOMMENDS USING WOOD STAKES TO SECURE THE WATTLES. 1/2" TO 5/8" REBAR IS ALSO ACCEPTABLE WITH A SAFETY CAP. BE SURE TO USE A STAKE THAT IS LONG ENOUGH TO PROTRUDE SEVERAL INCHES ABOVE THE WATTLE.
11. THE CONTRACTOR SHALL INSPECT WATTLES EVERY TWO WEEKS AND AFTER ANY SIGNIFICANT STORM EVENT AND MAKE REPAIRS OR REMOVE SEDIMENT ACCUMULATED BEHIND WATTLES AS NECESSARY.
12. SEDIMENT ACCUMULATED BEHIND WATTLE SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DIAMETER OF THE WATTLE.
13. WATTLES SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND IS ACCEPTED BY THE CITY.



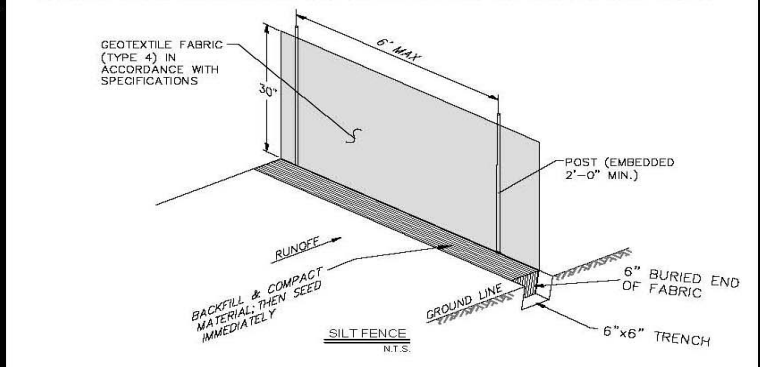
INSTALLATION NOTES

1. SILT DIKES SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.
2. STAPLES SHALL BE NO. 11 WIRE, 6" TO 8" IN LENGTH.
3. RUNNING LENGTHS OF SILT DIKES SHOULD BE OVERLAPPED TO ENSURE NO LEAKAGE AT THE ABUTMENTS.
4. THE CONTRACTOR SHALL INSPECT SILT DIKES EVERY TWO WEEKS AND AFTER ANY SIGNIFICANT STORM EVENT AND MAKE REPAIRS OR REMOVE SEDIMENT ACCUMULATED BEHIND SILT DIKES AS NECESSARY.
5. SEDIMENT ACCUMULATED BEHIND SILT DIKES SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DIAMETER OF THE WATTLE.
6. SILT DIKES SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND IS ACCEPTED BY THE CITY.

SILT DIKE

SILT FENCE NOTES:

1. POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. HERE FENCE CANNOT BE TRENCHED IN (e.g. PAVEMENT). WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
3. THE TRENCH MUST BE MINIMUM OF 6 INCHES DEEP AND 8 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS ATTACHED TO THE FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.



EROSION CONTROL PLAN EXAMPLE

